

The

SPECIAL
TWO
MONTH
ISSUE
JULY
AUGUST
1993

ACADEMY

NEWSLETTER

DEDICATED TO SCIENTIFIC RESEARCH AND EDUCATION, INSPIRING RESPECT FOR THE NATURAL WORLD

M E M B E R S M E E T I N G S

THE MAGIC OF SOCORRO ISLAND

WITH DR. LUIS BAPTISTA

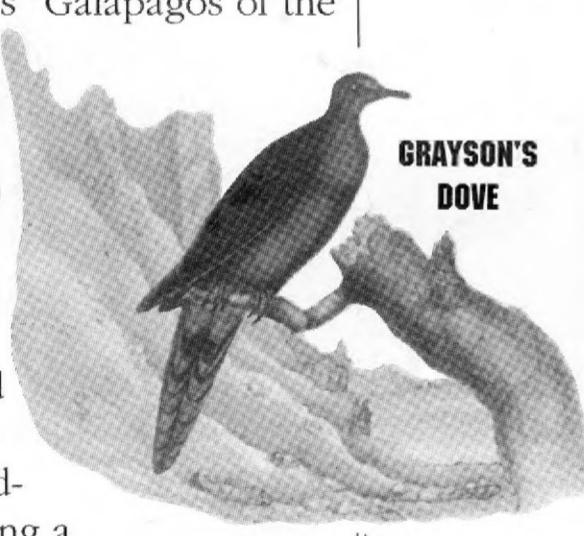
JULY 14, 2 & 7:30 PM

Dr. Baptista, Chairman of the Academy's Ornithology and Mammology Department and one of our most popular lecturers, will present a slide-lecture program on the little known Revillagigedo Archipelago. This "Galapagos of the Northern Hemisphere" is located 410 miles off the west coast of Mexico and is home to unique wildlife, including a mockingbird thought to be extinct but which was recently rediscovered.

Socorro Island has been the center of research activity for the Academy since 1903 when our first expedition arrived in the region. *Isla Socorro*, the largest island in the Archipelago, is home to ten unique bird species, some of which are highly endangered. Dr. Baptista's main research interests are in systematics and behavior, with an emphasis in avian bioacoustics. He is a world authority on birdsong; specifically, how young birds learn their species' languages and develop regional dialects.

Members Meetings are free to members, and seating is on a first-come, first-served basis. Please show your card at the entrance to the Auditorium.

AnnGiordano



GRAYSON'S
DOVE



ISHI, THE LAST YAH A FILM BY PAMELA ROBERTS & JED RIFFE, INTRODUCED BY PAMELA ROBERTS, AUGUST 11, 2 & 7:30 PM

This hour-long documentary film chronicles the remarkable and poignant life of Ishi, once known as the "last wild Indian in North America." His sudden appearance in 1911 stunned the country. His tribe was considered extinct, destroyed in the bloody massacres during the 1860's and 70's, and Ishi had been hiding for 40 years--the last of his tribe who refused to surrender.

Dr. Alfred Kroeber, who earlier was the Academy's first Curator of Anthropology, had been searching for years for "uncontaminated" Indians who could document aboriginal life in America. Kroeber invited Ishi to the United Anthropology Museums of San Francisco to live as an informant and teacher. While in San Francisco, Ishi's tireless dedication to recounting YAH stories and demonstrating their traditional way of life, and his remarkable lack of bitterness towards the people who had destroyed his tribe, greatly impressed those who met him. Alfred Kroeber's wife, Theodora, brought Ishi's story to the public with three books including *Ishi In Two Worlds: The Story of the Last Wild Indian in North America*.

Pamela Roberts, President of Rattlesnake Productions, is a film director and producer whose non-profit film and video organization is dedicated to ethnic diversity and cultural preservation. She will introduce this moving documentary.

DEAR ACADEMY MEMBERS,

Over the last several years, the Academy has experienced phenomenal growth, and membership has grown to 22,000.

It is our goal to provide you, our members, with the highest quality benefits. This includes, of course, unlimited admission, a subscription to Pacific Discovery, Members lectures, discounts at the Academy Store and Cafe, and a host of other events and services.

As the Academy continues to grow, our operating costs in sustaining the highest quality services consistently rise. In order to meet these rising costs we must periodically increase our rates. It has been several years since we've raised our membership dues or admission prices. In June, admission to

the Academy for adults was raised from \$6 to \$7. In turn, membership dues will increase \$5 on each category of membership. In addition, a new category will be created, Dual Senior at \$35 (two cards). Guest admissions will be dropped from all categories, and in its place all categories of membership will be given four guest passes per year.

We appreciate your past support and look forward to your continued membership in the Academy for the exciting years ahead.

With warm regards,

Roy Eisenhardt / Executive Director

SPECIAL MEMBERS MEETING AUGUST 12, 2 & 7:30 PM

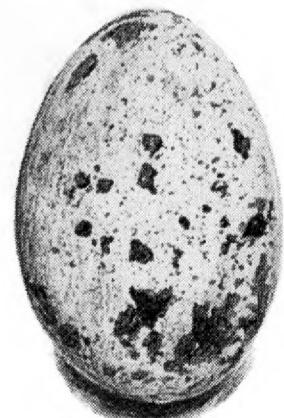
In celebration of the exhibit, "Birds of a Feather," we are pleased to present **Maryjo Koch**, author and illustrator of the book *Bird Egg Feather Nest*, published in cooperation with the National Audubon Society.

Maryjo Koch will discuss the process and techniques she used to illustrate her book and details about some of the birds she described.

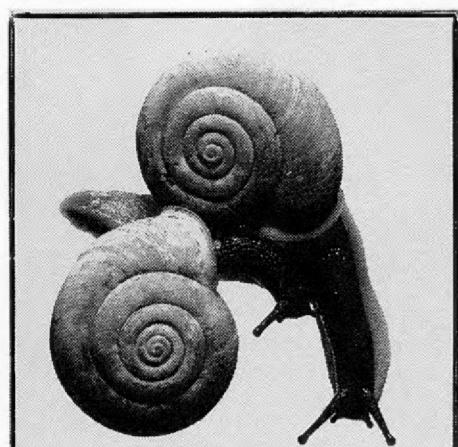
Joining Maryjo will be an ornithologist from Richardson Bay Audubon Center and Sanctuary who will discuss the life of John James Audubon.

Maryjo's beautiful book is available in the Academy Store for \$24.95, along with an exclusive t-shirt, created by Maryjo for \$15.00. The author will sign books following both lectures.

*September Members Meetings on September 8 at 2 and 7 pm, will feature Dr. Dennis Breedlove, Academy botanist, presenting "A Walk in the Cloud Forest." Please note the evening program is one-half hour earlier than the usual 7:30 time.



ENDANGERED UPDATE



© 1992 Susan Middleton David Liitschwager

Flat-Spired Three-Toothed Snail

Traversing across the continent for the last year, two Academy photographers have been actively documenting endangered species of the United States. Susan Middleton and David Liitschwager have been flying to distant corners of the country—capturing in beautiful photographs brief, magical moments in the lives of over 100 species of endangered plants and animals. These federally listed species are



© 1992 Susan Middleton David Liitschwager

Audubon's Crested Caracara

disappearing from our lands, our skies and our waters. The poignant portraits being created by these talented artists help to inspire people to save endangered species around the world.

American Airlines has graciously provided air travel for Susan and David as they journey to the varied landscapes of our country. From West Virginia to photograph the flat-spined, three-toothed snail, to Florida for the Florida panther and Audubon's crested caracara;



© 1992 Susan Middleton David Liitschwager

Florida Panther Cub

from the island of Hawaii to photograph the Mauna Kea silversword, to Sequim, Washington to photograph a grizzly bear, American Airlines has allowed these talented photographers quick and easy access to the unpredictable seasons of nature. The Academy is very grateful for their support. The Academy will premiere a national travelling exhibit of these photographs in the Fall of 1994, and a book featuring these striking portraits will be published by Chronicle Books simultaneously.

AmericanAirlines® AA

MORRISON PLANETARIUM



SKY SHOWS "TOUCH THE STARS" NEW FAMILY SHOW

Morrison Planetarium recently inaugurated a new show for the whole family as well as camp groups, scout groups and school groups. A humorous and lighthearted show, "Touch the Stars" focuses on astronomy activities which the whole family can enjoy together. Learn when and where to look for planets; how to see the Earth rotate; how to chart the Moon's changing position and shape; how to observe Jupiter's moons and how to look for meteor showers.

This program doesn't end when the lights come up—every family takes away a 16-page booklet of astronomy experiments. The program is shown at 11 am on weekdays through July and August, and 11 am on weekends throughout the year. Price is \$1.50. Children under 5 are free when seated on the lap of an adult.

"Touch the Stars" is made possible by a generous grant from The Stanley S. Langendorf Foundation.

In addition to this new show, other sky shows continuing for the summer are: "Starbirds" shown at 12:30 and 2 pm on weekdays, and 2 pm on weekends; "Nights of Ancient Days" shown at 3:30 pm on weekdays, and 1 & 3 pm on weekends; "Startalk" shown at 12:30 on weekdays and noon on weekends.

Call 750-7141 for more information.

TRADITIONAL ARTS

Enjoy diverse cultures with the Academy's Traditional Arts Program presented on Saturdays at 1 pm. Call 750-7164 for more information.

July 3 -- No Program

July 10 -- Lewis Mahlmann, the resident puppeteer at Children's Fairyland in Oakland for the last 27 years, brings a selection of marionettes, rod and hand puppets to show how they are manipulated. He'll also perform the Grimm's tale "The Frog Prince." Suitable for children of all ages!

July 17 -- Leonidas Kassapides, a native of Thessalonika, Greece, and the Paranoix Poor Theatre Company present an English-language version of "Metamorphosis"—a Greek shadow puppet play in the *karakhgiozis* folkloric tradition.

July 24 -- Using a small treadle loom, textile artist Jan Cook demonstrates the weave structure of Scottish highland tartans and discusses the historical development of clan patterns.

July 31 -- On tour from India, Viji Prakash performs *bharatanatyam*—classical dance-drama originating in the temples of South India—which interprets ancient Hindu epics depicting the lives of Krishna and Shiva. The narrative style communicates a spectrum of emotions through graceful hand gestures, expressive eye movements, and fast footwork. The artist is accompanied by the Shakti Dance company and instruments including the *mrdrangam* (drum) and *nattuvangam* (cymbals).

August 7 -- The Coastal Pomo Dancers from Stewarts Point Reservation perform ceremonial dances including the *toto koho* or feather dance, the deer dance, the hummingbird dance and the whistle dance.

August 14 -- David Smith, a member of the Kashaya Pomo Indian tribe, demonstrates the process of making acorn mush. Traditionally a nourishing food staple of many California Indian tribes, the acorn mush will be ground from tanbark oak (*Lithocarpus densiflora*), native to the coastal ranges of Northern California.

August 21 -- The trickster character appears in folktales from many cultures, often with a moral lesson to be learned. Storyteller Kate Frankel focuses on the trickster in her selection of tales from around the world.

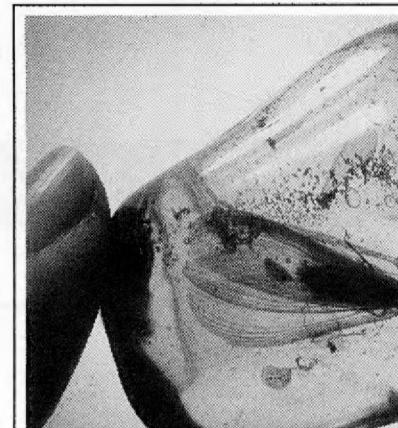
August 28 -- The Barbary Coast Cloggers perform precision clogging—a style of clogging featuring energetic and fast footwork, and synchronized movements of the dancers.



Napendra Prasad

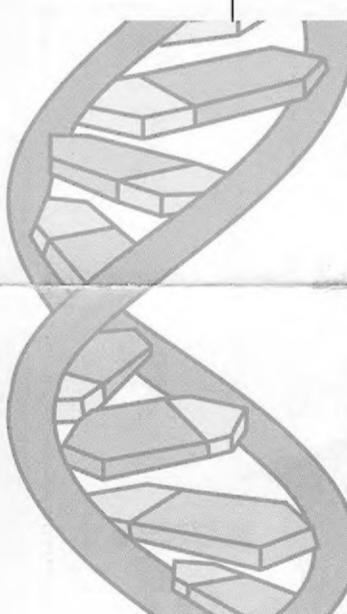
JURASSIC! JULY THROUGH FEBRUARY

Dinosaurs Academy on with the exciting new *Jurassic!* scientific fact using real casts, models and videos. Actual fossils from the Academy, the American Museum of Natural History and Berkeley are featured.



The highlight of *Jurassic!* is a *Tyrannosaurus rex* skeleton, measuring 15 feet high. This huge skeleton, which is a cast of two, has never been discovered and assembled and displayed in the Four

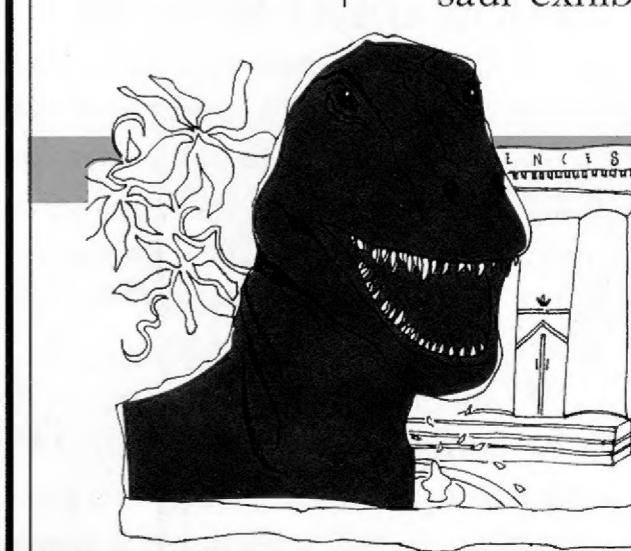
Can dinosaurs be cloned from blood sucking insects trapped in amber? *Jurassic!* presents current scientific research in this fascinating field. Photos and a model of the *T. rex* DNA, loaned by Genentech, Inc., are displayed. Amber specimens embedded in rock will help explain DNA research.



In the early 1920's, the Americans unearthed the first dinosaur eggs in Mongolia. New findings from an expedition to the Gobi Desert are presented in this new exhibit. The fossil skull of a *Protoceratops* and a *Triceratops* are just some of the finds. Other dinosaur fossils include a *Triceratops* skull and a *Stegosaurus* tail. Comparisons of meat-eating dinosaurs are compared with plant-eating *Triceratops*.

One of the villains of Michael Crichton's best-seller, *Jurassic Park*, the *Velociraptor*, is represented in the exhibit with a cast of a fossil skull and a life-size model of the vicious dinosaur. Touchable specimens of the *Velociraptor* claw and a sauropod leg bone collected by the Junior Academy will be included. A *Brachiosaurus* will show when these dinosaurs actually occurred in the Cretaceous or Triassic periods. Visitors can learn about dinosaurs in the Academy's permanent hall, Life Through Time. The Academy would like to thank Universal Pictures and the AMNH for their assistance and cooperation with *Jurassic Park* on June 15th.

Come to the Academy to enjoy the *Jurassic!* exhibits in Northern California.



THE ACADEMY

Jurassic! Store
Jurassic! Store located in the Academy's lobby, offers a variety of dinosaur products including books, T-shirts for adults and children, and dino games and

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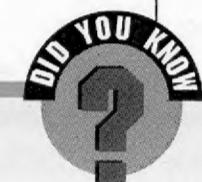
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STORE

The Academy Store will have a special
located in Linking Hall featuring all new
ts for the whole family. Items include:
s and children, books, videos, amber,
toys, jewelry and models

**STEGOSAURUS**

Weighed up to two
tons. Found in Colorado,
Oklahoma, Utah and
Wyoming.

**TYRANNOSAURUS**

Weighed seven tons.
Found in western North
America and China.

**TRICERATOPS**

Weighed six tons.
Found from Alberta
to Colorado, and
Saskatchewan to
South Dakota.

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Photo left,
© 1993 Ed
Bridges, Amber
courtesy
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Natural History

L E C T U R E S



"BEHIND THE SACRED MASK"

WITH PETER GOLD—AUGUST 31, 7:30 PM

Throughout the world, human cultures have created and used masks in search of the sacred. Masks embody deities and spirits which themselves signify universal qualities and powers existing in the cosmos beyond and the universe within. Masks serve as ritual tools for the purpose of maintaining or establishing this "state of the sacred."

In his vivid slide lecture, anthropologist Peter Gold introduces us to the meaning and ritual use of sacred masks from several important cultural traditions on both sides of the Bering Strait. They include shaman vision masks of the Yupik Inuit (Alaskan Eskimo); kachina ritual masks of the Hopi and Pueblo Indians, and tutelary deity masks of the Apache and Navajo Indians (Southwest U.S.); and the masked pantheon of Buddhism and the pre-Buddhist Bön religion (Tibet).

COST: \$6/\$8

"LIFESTYLES IN THE DEEP SEA: THE COLD & SLUGGISH VS. THE HOT & LIVELY"

WITH DR. GEORGE SOMERO—SEPTEMBER 18, 6:30 PM**

The California Academy of Sciences and Oregon State University proudly present an intriguing program which contrasts life in the typical deep sea with life at the hydrothermal vents (deep sea hot springs). Dr. George Somero will contrast these two environments to show how physical and chemical characteristics of the environment shape the properties of organisms. Animals which live in the deep sea have adaptations which allow these species to cope with extremes of pressure and temperature. The "slow" species of most of the deep sea are slow, not chiefly because of the cold, but as a result of the limited food supply. They have developed unique feeding strategies and other unusual adaptations.

In contrast to the common, cold areas of the deep sea, the hot springs found at spreading centers have abundant life. Animals in these areas are active and plentiful primarily due to the rich supply of geochemical energy, largely in the form of sulfide. Sulfide replaces sunlight as the energy source for these animals and they have developed symbiotic, sulfide-burning bacteria which provide their animal hosts with foodstuffs. These novel life forms were discovered fairly recently, and their study has provided insights into new fundamental organism designs.

Dr. Somero is a member of the National Academy of Sciences and is the Gladys Valley Professor of Marine Biology at Oregon State University.

*Please note early time of lecture.

COST: \$6/\$8

"FALSE FACES: THE FUNCTION OF MASKS IN ANCIENT MESOAMERICA"

WITH DR. CECELIA KLEIN—SEPTEMBER 24, 2-4 PM

The California Academy of Sciences and The Docent Council of the M.H. deYoung Memorial Museum are proud to present Dr. Cecelia Klein, Professor of Art History at UCLA, discussing the use of masks in ancient Mesoamerica.

At UCLA, Dr. Klein teaches Pre-Columbian Art, Oceanic Art and Native North American Art. Her research interests include Aztec art, ideology, politics and social change in Aztec art; and the historiography of "Primitive" art.

Her lecture on masks of ancient Mesoamerica is a docent training class open to the public. The audience will be invited to the deYoung's "Art of Americas" Gallery after the lecture to view their Mesoamerican masks.

COST: ACADEMY & SOCIETY MEMBERS \$3/NON-MEMBERS \$5

For these lectures please use the coupon on the back page to order your tickets. Call 750-7128 for recorded information.

ACADEMY TRAVEL

1994



ANTARCTICA, S. GEORGIA & FALKLANDS CRUISE
Dec 20, 1993-January 10 with Dr. John McCosker

THE MAYA CENTERS OF BELIZE
(WITH EXTENSION TO TIKAL)
February 9-16 (Extension February 16-19)
with Dr. Richard Hansen and Bob Glavin

FOODS OF ITALY
Spring with Daphne Derven
and Rolando Beramundi

SEA OF CORTEZ CRUISE
April 10-17 with Dr. Jim Kelley

FOLK ART AND ANTIQUITIES OF TURKEY
May with June Anderson

THE GALAPAGOS ISLANDS CRUISE
AND ANDEAN HIGHLANDS
May 13-25 with Dr. Terry Gosliner

SEA KAYAKING IN ALASKA
June with Dr. Dave Kavanaugh

REDISCOVERING RUSSIA &
THE BALTS CRUISE
June 5-21

ALASKA OVERLAND
July with Dr. Dave Kavanaugh

RAFTING ON THE MIDDLE FORK,
SALMON RIVER
July 31-August 5 with Greg deNevers

MARITIME CANADA, BAY OF FUNDY
AND COASTAL MAINE CRUISE
September 3-17 with Dr. Rich Mooi

THE ISLANDS OF INDONESIA CRUISE
September 11-24 with Dr. Jim Kelley

EXPLORING THE PACIFIC NORTHWEST CRUISE
September 14-19 with Brian Gibeson

NATURAL WONDERS OF WESTERN AUSTRALIA
September 16-October 2 with Dr. Frank Almeda

EXPLORING THE UPPER AMAZON CRUISE
October 31-November 7 with Dr. Carl Feraris

INDIA, NEPAL AND SRI LANKA
Fall with Dr. Bob Drewes

*Call 750-7348 for details about these
fascinating trips.*

SAN FRANCISCO

GEM AND MINERAL SHOW

August 7 and 8

The California Academy of Sciences will exhibit outstanding specimens of jade from near and far to emphasize the theme "Shades of Jade" at the 39th annual *Golden Gateway to Gems* show of the San Francisco Gem & Mineral Society. There will be displays of lapidary, intarsia and faceting, collections of minerals from around the world, and the Academy's Dr. Jean DeMouthe will discuss jade.

The show is at the San Francisco County Fair Building in Golden Gate Park. Hours: 10 am-6 pm, Saturday, August 7; 10 am-5 pm, Sunday, August 8. Academy Members receive a 50-cent discount on the admission price of \$3.50.

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COUPON FORM

LECTURES

	Qty/Members & Museum Society Members	Qty/Non-members	Total
Members			
Museum Society Members			
	x \$ 6	x \$ 8	=

BEHIND THE SACRED MASK
WITH PETER GOLD
TUESDAY, AUGUST 31, 7:30 PM

LIFESTYLES IN THE DEEP SEA:
THE COLD & SLUGGISH VS.
THE HOT & LIVELY
WITH DR. GEORGE SOMERO
SATURDAY, SEPTEMBER 18, 6:30 PM

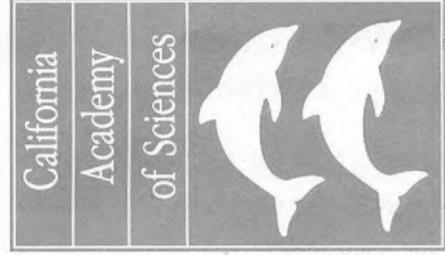
FALSE FACES: THE FUNCTION OF MASKS IN ANCIENT MESOAMERICA
WITH DR. CECELIA KLEIN
FRIDAY, SEPTEMBER 24, 2:00-4:00 PM

TOTAL \$ _____
DONATION
I would like to support the Academy's work with a donation
\$ _____

PAYMENT METHOD
(Check one) Check VISA MasterCard American Express
Credit card charges gladly accepted over \$10.
Card# _____
Signature _____

MAKE CHECK PAYABLE TO: California Academy of Sciences and mail with this coupon form to:
Membership Office, Ticket Services
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118
Daytime Phone _____

TOTAL PAYMENT ENCLOSED \$ _____ **PLEASE INCLUDE A S.A.S.E. FOR EACH SERIES FOR WHICH YOU SUBSCRIBE. NO REFUNDS/NO EXCHANGES.**



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The Academy is open
every day of the year
from 10 am to 5 pm.

Academy Information: 415-750-7145

Academy Store: 750-7330
Admissions: 750-7159

Aquarium: 750-7247
Biodiversity Resource Center:
750-7361

Development Office: 750-7216
Education Office: 750-7100
Group Information: 750-7043
Laserium: 750-7138
Lectures: 750-7128

Library: 750-7102
Lost and Found: 750-7150
Membership Office: 750-7111
Planetarium: 750-7141
Planned Giving: 750-7216
Security: 750-7000
Switchboard: 221-5100
Travel: 750-7348

Volunteer Services: 750-7154
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118-4599

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JULY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
4 Summer hours start! The Academy is open from 10 am-7 pm everyday through Labor Day.	5 DOLPHIN FEEDINGS are at 10:30 am, 12:30 pm, 2:30 pm and 4:30 pm every day.	6	FISH ROUNDABOUT FEEDINGS are at 2:00 pm every day.	7	1 VISIT "HANDS ON SCIENCE" This exhibit is a runaway hit with children of all ages! Look through a microscope at nature's intricate compositions, compare the feel of a giraffe leg bone to that of an elephant; see images produced by the Scanning Electron Microscope.	2
11	12	13	14 Members Meetings, "Socorro Island," 2 & 7:30 pm	8	9 Learn all about dinosaurs and DNA at " JURASSIC! " opening July 10.	10 <i>Jurassic!</i> exhibit opens 'Gator Gala, 8:30 pm-1 am. Call 750-7216 for tickets
18	19	20	21	15	16	17 Traditional Arts, puppet show, 1 pm
25	26	27	28	22	23	24 Traditional Arts, Scottish tartans, 1 pm
		PLANETARIUM SKY SHOWS on weekdays at 11, 12:30, 2, 3:30 pm				31 Traditional Arts, Indian dancing, 1 pm

AUGUST

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 THE BIODIVERSITY CENTER has moved into Cowell Hall and is now open everyday from 10 am-4 pm.	3	4 Free First Wednesday	5	6 ENJOY "BIRDS OF A FEATHER" a beautiful, new exhibit which explores the intriguing world of feathers and flight.	7 Traditional Arts, Pomo dances, 1 pm
8 San Francisco Gem and Mineral Show	9	10 THE ACADEMY BOOKSTORE has relocated to the east side of Cowell Hall, near the main Store and features fascinating books about science and the natural world.	11 Members Meetings, "Ishi," 2 & 7:30 pm	12 Members Meetings, "Bird Egg Feather Nest," 2 & 7:30 pm	13	14 Traditional Arts, Acorn mush, 1 pm
15	16 LASERIUM SHOWS Wednesday-Sunday Evenings Call 750-7138	17	18	19	20	21 Traditional Arts, Story-telling, 1 pm
22	23	24	25	26	27	28 Traditional Arts, Cloggers, 1 pm
29	30	31 Lecture, "Behind the Sacred Mask," 7:30 pm				SEPTEMBER DATES TO REMEMBER September 18, Lecture, "Lifestyles in the Deep Sea," 6:30 pm September 24, Lecture, "False Faces," 2:00-4:00 pm